Q1. 4 Quarterly Audits are planned Q1, Q2, Q3, Q4 for this Project What is your knowledge on how these Audits will happen for a BA?

A. audit is the inspection of the work. It is carried out to check as what workflow is carried out to complete the project.

Below are the audit report for each quarter.

Quarter 1

Stage	Quater 1 Audit Report: Requirement Gathering Phase	
Completed	10 Weeks	
Checklist	BRD template	
Duplicate requirement report		
	Elicitation result report	
	Grouping of functionalities- client sign off	
	Email communication	

Quater 2

Stage	Quater 2 Audit Report: Requirement Analysis Phase	
Completed	7 Weeks	
Checklist	UML diagram	
	Business to functional requirement mapping	
Client sign off		
	RTM document version control	
	E-mail communication	

Quater 3

Stages	Quater 3Audit Report-Design Phase	
Completed	8 Weeks	
Checklist	Utilization of tools	
Client communication evidence		
Stakeholder MOM		
	JAD session report	
	E- mail communication	

Quater 4

Stage	Quater 4 Audit Report- Testing Phase
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Completed	20 Weeks	
Checklist	Test Case Summary	
	Training report to end user	
	End user manual preparation document	
	Lesson learnt document	
	Email communication	

Q2. BA Approach Strategy

A. BA follows a set of process or strategy to complete the project, which includes gathering the requirement using the elicitation techniques, stakeholder analysis, sorting of the collected requirements, prioritizing the requirements and validating the requirements.

What Elicitation Techniques to apply

Elicitation techniques is a process used to dig out information from the stakeholders. It acts as a foundation for the requirement gathering. Below are the few elicitation techniques used,

- Brainstorming: It is a technique used to generate ideas, solutions and requirements for the project. In this technique the questions and challenges are introduced to the participants, and they are asked to propose ideas and solutions. This technique is basically used to get all possible solutions for a problem. It is most effective in the group of 8-12 participants. But time limit should be determined for this technique and the participants should be determined.
- Workshops: -Workshop is a structured meeting where the stakeholders and the subject
 matter experts work together to get the project requirements. It is conducted to get the
 high level functional and non-functional requirements. For this project the key
 stakeholders Peter Kevin and Ben and technical leads Ms Juhi and Mr Vandanam will
 work together to identify the requirements.it is the most effective way to deliver a highquality requirement quickly.
- Questionnaires/ Surveys: this is a method to gather all the information from multiple stakeholders. We can collect data from the group of farmers and the manufacturers about their requirement and preferences.

How to do stakeholder analysis?

Each stakeholders have a specific role and responsibility in the project. The RACI matrix helps to clarify the roles and responsibilities and ensure that the stakeholders needs are addressed in the project and thereby minimizes the confusion during project execution.

R- Responsible: The individuals responsible for caring out the task

A- Accountable: The individuals answerable for the task. The one who delegates the work

- C- Consulted: The individuals who needs to be consulted before the decision in been taken. Usually a subject matter expert
- 1. I- Informed: The individuals who needs to be kept informed about the decision or the progress. They are nowhere involved in the execution.

<u>Task</u>	Responsible	Accountable	Consulted	Informed
Requirement Gathering	BA	Mr.Henry	Peter, Kevin,Ben	Mr. Karthik
Planning	Mr.Vandanam		Techincal Team	Mr. Pandu, Mr.Dooku
Design	Ms. Juhi	Mr. Vandanam	Techincal Team	BA
Development	Technical Team	Mr. Vandanam		Stakeholder
Testing	Mr. Jason Ms. Alekya	Mr. Vandanam	Technical Team, BA	Stakeholder
Change request management	BA	Mr. Vandanam	stakeholders	Stakeholders
UAT	BA	Mr. Henry	Mr. Dooku, technical team	All stakeholder

What documents to write?

- Business Requirement Document (BRD): It is a detailed documentation of all business requirements gathered from the stakeholders .It is a high level document which outlines the business needs and the goal of the project
- Functional Requirements Specification (FRS): It is a document which is prepared after BRD. It describes how the system will perform to meet the business requirements it breaks down the business requirements into technical specifications.
- Non-Functional Requirements: It is the document which captures the performance, scalability, user experience expectation and security
- Use Case: it documents as to how the user interacts with the system
- Wireframes: Visual representation of the UI
- Test Case Document: This document includes test case strategies, test case, bugs, execution reports

What process to follow to Sign off on the Documents

Taking a sign-off on the document is a formal process which acknowledges the completion and timely delivery of the project. Below are the steps to follow for the sign off procedure:

- Preparing the sign-off documents
- Organizing the signoff meeting
- Discussing the feedback
- Taking the sign off via email
- Communicating sign- off to all the stakeholders

How to take Approvals from the Client

Conduct a formal meeting with the client, update them with all the documents and changes and get their continuous feedback and approval. Once it is received send a formal email for the approval and share the same with all the stakeholders and document it.

What communication channel to establish and implement

Regular face to face meeting, daily standup meeting, sprint planning, review meeting, E-mail communication, project management tools like JIRA, etc can be used.

How to handle change request?

we need to receive a change request in a standardized form which documents the requested changes, impact on the time and the budget and process of approvals. then we need to do impact analysis discuss and get approvals from the committee and the stakeholder. Communicate the final approval or rejection to the client and then implement and document the changes.

How to update the progress of the project to the stakeholders

Daily or weekly meetings can be conducted to give the update and the progress of the project. Use burndown chart can be used for visual representation of the project in order to compare the progress of the project with the actual timeline set.

How to take sign-off on the UAT- Client project acceptance form

UAT and client project acceptance form is important as it communicates that the project is accepted by the client, it meets the client expectation. Below are the steps involved:

- Preparing the UAT document in which the user acceptancecriteria are clearly defined and the same is agreed by the client
- UAT execution where the user will be testing the system based on the test case.
- Taking feedback and resolving the issues before taking the final sign-off.

 Review the final form with the client and obtain the approvals and proceed for the closure of the project by taking the sign-off

Q3. What is 3 tier architecture?

A. 3 Tier architecture is a software application which organizes the application in 3 logical tier.

Application layer, business logic layer, database layer

- Application Layer: this is responsible for user interface and user experiences. It handles
 the interaction of user with the provided data. Application layer is responsible for
 displaying information to the user, sending the request to the business logic layer.
- Business Logic Layer: there are certain rules and logic set for the business. This layer
 process the request received from the user from the application layer and takes decision
 based on the business rules. It communicates with the database layer to fetch modify
 the data
- Database Layer: this layer manages and stores the data in a secured way. It is responsible to perform CRUD (Create, Read, upload, delete)

Q4. BA approach for framing questions

A. BA should keep in mind certain points before framing and asking the questions to the stakeholders. Below are the various techniques:

1. <u>5W1H</u>- This is a framework helps to analyze the project by addressing the below questions:

WHO? Who will be the primary user? Who are the stake holder Farmers, Manufacturers, Delivery team.

WHAT? What product is required and with what functionality?

Online platform for the farmers to purchase the farming product

WHEN? When is the product required what is the timeline?

Over 18 months with the budget of 2cr

WHERE? Where will the user access the product or the application and also is ther any physical location to be considered?

The farmers want the application in there mobile and the goods needs to be delivered in the remote area of the village.

WHY? why is the application required and what problems will be solved by the same? To reduce the logistic challenges for the farmer and easy availability of the products.

HOW? How will the product/application work to attain the project objective?

Through web/mobile application which will connect the farmer with the manufacturers

2. SMART:

- S-Specific: Ensures the clarity and precision for gathering the requirement. What specific feature is required in the product/ application.
- M- Measurable: It should be quantifiable. So around 90% of the farmers should be able to use the application during UAT
- A-Attainable: It should be feisable and revelent. The end user or the farmers should be able to use the application.
- R- Relevant: it should aligne with the organizational goal. The farmers should be able to place the order and the products needs to be delivered in the remote areas and the manufacturers should be able to sell their products by making profit.
- T-Timebound: the project should have a specific time limit. The progress should be tracked and monitored in order to deliver the product/ application on time

3. RACI Matrix:

R-Responsible: The individual responsible for performing the task.

A- Accountable: The individual answerable for the task ie to get the feedback.

C- Consulted: the stakeholder whom we need to consult for achieving the project objective.

I-Informed: the stakeholder whom we need to inform the progress of the project.

4. 3 Tire Architecture: It is a software application architecture which organizes the application in three logical layers as follows;

Application layer: It is used for the user interface and user need.it is responsible for displaying the application to the user and collects request from the user for the business logic layer.

How will the first page look like? How will the filter option work? Will the application be available on both web and mobile

Business logic layer: it involves some business rules and logic. It takes the request from the application layer and takes decision based on the business

rules.it communicates with the database layer to add or modify the

data. How will the application behave if product is out of stock?

How will

the system work if the farmer place an order?

Database layer: This layer manages and stores the data in a secured way. What type of data will be stored? How will the data manage the availability of the product? How will it manage the payment option?

5. Use Case: It defines as to how the user will interact with the system. We can ask question like, can you describe the actual buying process of the farmers using the app?

- 6.Use case specification: It provides detailed functional behavior of the system from user perspective. Eg. How will the system response for adding the product, using the payment option, etc.
- 7. Activity Diagram: It is a type of UML for visual representation of the workflow of the system or the process. It will illustrate how the farmer will interact with the system to browse, select and purchase agriculture product and how will the system process the action.

Q5. As a Business Analyst, What Elicitation Techniques you are aware of? (BDRFOWJIPQU)

A. Elicitation techniques are used to dig out information from the stakeholder. It acts as a foundation or base for the procuring the requirement. Below are the elicitation techniques.

<u>Brainstroming:</u> this technique is used to generate wide range of ideas and solution or requirementsin short amount of time. The participates are introduced to a situation or challenges and they are asked to give a proposed solution for the same. It is a collaborative group technique to get maximum ideas without criticism.

<u>Documentation Analysis:</u> This technique involves reviewing of current documents such as business process map, current standards and policies, reports etc to acquire relevant informations and requirement. It is used to understand the current process.

Reverse Engineering: Reverse engineering is generally used in Migration Projects. here the system /product has a little or outdated documentation, and it is important to know what the system/product does. So reverse engineering gathers requirements from the system code. There are 2 categories in this ie. Black box reverse engineering in which the system is studied without examining the internal structure and White box reverse engineering where the internal structure is studied.

<u>Focus Group:</u> in this technique as small group of stakeholders usually the end user gather together in order to discuss and present their needs for the project or and process there can be homogenous group where all the individual has similar kind of opinion and hetrogenous group with difference of opinion.

Observation: Sometimes the stakeholders ie the users are not able to communicate their requirement or needs properly. Hence observation technique is used where the requirements need to be gathered only by observing the user working in their natural enviroment. It can be active observation where question can be asked during the work. or passive observation where the BA usually takes the notes and the questions are been asked only after completation of the task.

<u>Workshop:</u> Workshop is a structured meeting where the stakeholders and SME comes together for gathering the requirements. This technique is used to gather high-level functional and non-functional requirement.

<u>Joint Application Development (JAD)</u>: highly structured and collaborative workshop that involves stakeholders and technical team and development team to define system requirement.

<u>Interviews:</u> this is a systematic approach to elicate information from the person or group of people. It is a one on one discussion with the stakeholder to gather detail insight about the need.

<u>Prototyping:</u> This involves building a simple version of the system that the stakeholder can visualize and interact with. Feedback from the stakeholder are taken into consideration to improve the system.

<u>Questionnaires</u>: This technique is used to collect information from large group of stakeholders which can help identify trends and requirements.

<u>Use case</u>: Use case defines how the user will interact with the system to achieve a specific goal.

Q6. Which Elicitation Techniques can be used in this Project and Justify your selection of Elicitation Techniques?

A. Each of the elicitation has its own strengths depending upon the stages of the project. By using various technique together can we can gather the requirements for complex system or projects.

<u>Prototyping</u>: in this technique a simple version of system/ application is developed which the user can visualize and interact with. Feedbacks and changes are being accepted for the timely and accurate delivery of the system/ application.

<u>Use Case</u>: This defines how the user interacts with the system to achieve a specific goal. Creating use cases with the stakeholders helps to define the functional requirements in a structured way.

<u>Brainstorming:</u> this technique is use to gather ideas, requirement and solutions from the stakeholders. the stakeholders or the participance are introduces to a situation and asked to give a prospect solution or ideas in the short amount of time. The goal is to get maximum number of ideas possible. In this case we can use brainstorming as this project is new so understanding all the requirement of each stakeholder is very important for the delivery of a user friendly system/ application.

Q7. Make suitable Assumption and identify at least 10 Business Requirement?

A. Business requirement are high level requirement, collected to achieve the business needs or goal which is given by the client. Below are the 10 business requirement:

REQ Id	Description	
BR001	Farmer and the manufacture should be able to login to the application by providing their email id and password. The new user need to provide his personal information in order to login and be able to create a secured new password.	
BR002	The application should have a proper user friendly navigation and it should be accessible in various devices such as laptops, mobile, tablets.	
BR003	Farmers should have a search option and should be able to browse through the product catalog.	
BR004	Manufacture should be able to upload products the description of all the products	
BR005	The application should update about the availability of the product, update out-of-stock for the unavailable products.	
BR006	The application should protect the personal information provided by the user	
BR007	The system should provide multiple payment options such as cash on delivery, payment through debit/credit card, UPI.	
BR008	The application should have a good tracking system in order to track the ware bouts of the order	
BR009	The user should be able to add the item in the cart and save it for the later order.	

BR010	Once the order is placed the user should get a email confirmation
i	about the order placed.

Q8. List your assumption.

A. Below are the list of assumptions:

- The farmers can shop and buy directly from the manufacturer through the online shopping application.
- The application should be user friendly for browsing, uploading and placing the order.
- Notification about the order should be sent to the user and the manufacturer.
- The system should use multiple forms of payment.
- The application should be delivered within the given timeframe and the budget.
- The logistic of delivering the product should be taken care of, the products should be delivered to the remote location without any delays.
- Mobile device and internet should be available with the user
- The user should have the knowledge to use the device and the application.

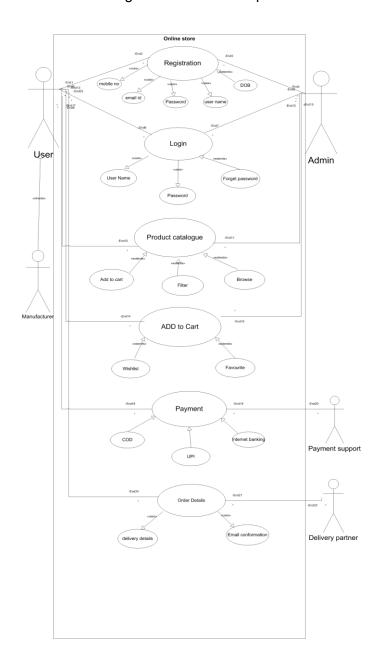
Q9. Give priority to the requirements.

A. based on the business values the priority points are given to the business requirements. Business values are decided by the client and the priority points are given by the BA after discussing with the development team.

REQ ID	REQ Name	Description	Priority
BR001	Login	Farmer and the manufacture should be able to login to the application by providing their email id and password. The new user need to provide his personal information in order to login and be able to create a secured new password.	10
BR002	Accessi bility	The application should have a proper user friendly navigation and it should be accessible in various devices such as laptops, mobile, tablets.	3
BR003	Browse option	Farmers should have a search option and should be able to browse through the product catalog.	5
BR004	Upload product	Manufacture should be able to upload products the description of all the products	10
BR005	Availabi lity of product	The application should update about the availability of the product, update out-of-stock for the unavailable products.	7
BR006	Securit y	The application should protect the personal information provided by the user	9
BR007	Payme nt option	The system should provide multiple payment options such as cash on delivery, payment through debit/credit card, UPI.	9

BR008	Trackin	····	6
	g	order to track the ware bouts of the order	
	system		
BR009	Cart	The user should be able to add the item in the cart and	4
	function	save it for the later order.	
	s		
BR010	Confirm	Once the order is placed the user should get a email	8
	ation	confirmation about the order placed.	

Q.10. Draw a Use Case diagram.A. Use case diagram is the visual representation of how the user intracts with the system.



Q 11. Usecase Spec

A. Use case document for "Login" to the online agricultural store.

Use case id	UC001	
Use case Name	User Login	
Created By	ABC	
Data Created	01.09.2025	
Actor	Farmer, Manufacturer	
Description	This describes how the user can login	
Pre-Condition	a. The user should have a mobile/desktop/laptop with the	
	internet connectivity.	
	b. The user should be a registered user.	
Post- Condition	a. The user should be able to login to the application using	
	his mobile number/ user id/ email id and password.	
	b. After login in the user should land into the dashboard page	
Normal Flow	a. The user clicks and open the online agriculture store	
	application.	
	b. The app has a login page will have a field for the user to	
	input his login details such as mobile no/ email id/ user	
	name and password.	
	c. The user will enter the required correct details of login and click on login button.	
	d. The system will verify the details and dashboard page will	
	be displays where the user can browse/ upload the products	
Alt	accordingly.	
Alternate Flow	a. In case where the user fails to login successfully, the error	
	message of "Invalid Credential" will be displayed on the	
	system.	
	b. The user will have 2 options, Forgot id/ Forgot Password	
Exception	c. The system will ask to re-enter the login details. a. Incase the server is slow or under maintenance	
Exception		
Erogueney of Lice	b. in case of low internet connectivity High	
Frequency of Use		
Assumptions	a. The user is the registered user.	

Use case for "New Registration"

Use case id	UC002
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Use case Name	New User Registration
Created By	ABC
Data Created	01.08.2025
Actor	Farmers, Manufacturers
Description	The Farmers and the Manufactures should be able to register
	to the application
Pre-Condition	a. The user has never been registered to the application
	b. The user should have internet connective
Post- Condition	The user should be able to login with the login credential
Normal Flow	a. The user opens the application and clicks on "New User"
	b. The systems asks for the Name, Mobile no, Email id, DOB.
	c. The systems verifies and ask to create the password.
	d. Once the Id and password is created the system sends the
	conformation email and SMS of successful registration to
	the user
Alternate Flow	a. The user had entered a invalid user detail, the system will
	pop up an error message of "Invalid details" Please try again.
	b. The user is using a registered login detail, the system will
	not accept and sends an error of "User Already Registered"
Exception	
Frequency of Use	medium
Assumptions	The user provides correct mobile number and email id

Use case for Online Purchase of the product

Use case id	UC003
Use case Name	Online purchase
Created By	ABC
Data Created	01.08.2025
Actor	Farmers
Description	The Farmers should be able to add the required products to
	the cart and do online purchase.
Pre-Condition	a. The user should login with the valid credentials.
	b. The products must be available in stock
Post- Condition	The user should be able to place an order and the system
	should send a confirmation mail
Normal Flow	a. The user logins to the application with the correct login
	credentials.
	b. the user search, browse and adds to the cart the required
	product.

	c. Once the user clicks on checkout option and do the payment the confirmation mail and SMS should be sent to the user confirming the online purchase.
Alternate Flow	The product is out of stock; the system will pop up with the
	message of Notify Me and gives a alternate option
Exception	Due to server issue, there is a payment failure, the system
	asks to retry
Frequency of Use	High
Assumptions	The product are in stock

Use Case for Upload Product Details

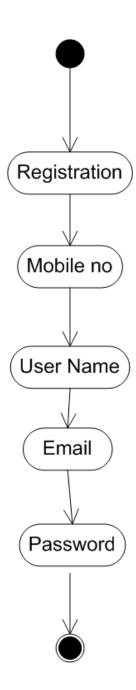
Use case id	UC004
Use case Name	Upload Product Details
Created By	ABC
Data Created	01.08.2025
Actor	Manufacturers
Description	The Registered Manufacturers upload their available product with a detailed description and price.
Pre-Condition	a. The manufacturer should be a registered dealer.
	b. The product details uploaded should be a valid one
Post- Condition	The farmers should be able to view and buy the uploaded products
Normal Flow	a. The manufacturer logins to the application and click on upload products.
	b. the system asks to feed the information like name, quantity, price and availability
	c. System validates the information
	d. The product is displayed on the application for the farmers
	to purchase
Alternate Flow	The product details entered are invalid the system will not
	accept the same
Exception	Due to application server issue the product are not uploaded
Frequency of Use	medium
Assumptions	The manufactured provides the valid information of the products uploaded.

Use case id	UC004
Use case Name	Payment Page
Created By	ABC
Data Created	01.08.2025
Actor	Farmers,
Description	The farmers to makes payment for the purchase product
	through various modes available.
Pre-Condition	a. The user should have added the required product to the
	cart
	b. The user should have mentioned the correct shipment
	address.
	c. The payment options available are secure payment option
Post- Condition	The user should have multiple payment option such as COD,
	UPI, Internet Banking for making the payment
Normal Flow	a. The user login to the application.
	b. Browse the required product
	c. Adds the required product to the cart after checking the
	availability.
	d. The system redirects to the payment page once the user
	clicks on proceed to pay option
	e. On the payment page the user finds various options such
	as UPI, COD, Internet Banking for making the payment.
	f. The selects the desired payment option.
	g. The system process the payment through payment
	gateway page
	h.once the transaction is confirmed through payment
	gateway page the system displays confirmation message of Payment Successful! , Order has been placed.
	i. The user receives the order confirmation message through
	SMS/Email.
	of 10/Email:
Alternate Flow	a. The user wants to change the payment option, by clicking
, acominato i tovi	on the back option the system will redirect it to the payment
	option page
Exception	a. If the payment fails the system displays the message of,
·	Retry after few minuities.
Frequency of Use	medium
Assumptions	The user are aware of all the supported payment options.
	There is sufficient amount available in the chosen payment
	option.

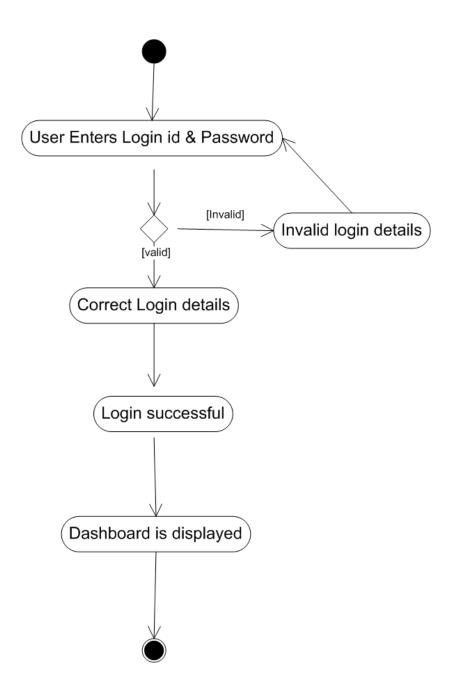
Use case id	UC005
Use case Name	Browse Product
Created By	ABC
Data Created	01.08.2025
Actor	Farmers
Description	The user can browse the product, check its description
	before the deciding it to purchase.
Pre-Condition	a. The user should have logged in to the application
	b. The products should be updated in the application
Post- Condition	The user should be able to browse the required products
Normal Flow	a. The user should login to the application
	b. The user should be able to navigate to Browse product
	option.
	c. The system displays various product option with the
	details of price, production description and availability of the
	product
	d. The user can select the product to add it to the cart
Alternate Flow	If there are no products the system will display the message
	of unavailable stock.
Exception	The application/ system is under maintenance
Frequency of Use	High
Assumptions	The manufacture has uploaded all the required products
	with a detailed description and price

Q. Activity diagram.

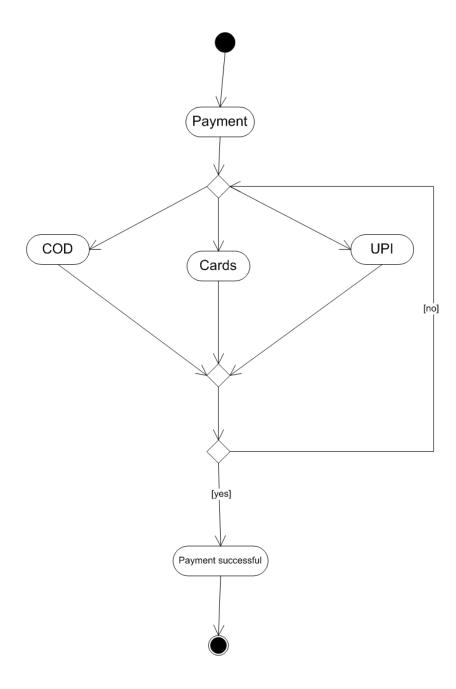
1. Registration Flow



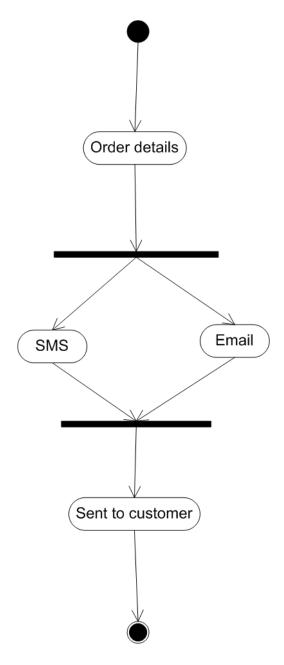
2. Login to the dashboard



3. Payment flow



4. Order Details flow



5. Add to cart flow

